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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,577	12/29/2000	Ephraim Feig	SOM919990022US1(1963-7364	6519

7590 07/16/2007	EXAMINER
WILLIAM E. LEWIS	STORK, KYLE R
RYAN, MASON & LEWIS, LLP	
90 FOREST AVENUE	
.LOCUST VALLEY,, NY 11560	

ART UNIT	PAPER NUMBER
2178	

MAIL DATE	DELIVERY MODE
07/16/2007	PAPER

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/750,577
Filing Date: December 29, 2000
Appellant(s): FEIG, EPHRAIM

JUL 16 2007

Technology Center 2100

Robert W. Griffith
Reg. No. 48,956
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1 March 2007 appealing from the Office action mailed 19 April 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Venners, "Java's garbage-collected heap: An introduction to the garbage-collected heap of the Java virtual machine," August 1996.

Birrell et al., "Distributed Garbage Collection for Network Objects," 15 December 1993.

| 6638314 | Meyerzon et al. | 10-2003 |
| 5806078 | Hug et al. | 9-1998 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-6, 16-18, 20-21, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venners ("Java's garbage-collected heap: An introduction to the garbage-collected heap of the Java virtual machine," August 1996) and further in view of Meyerzon et al. (US 6638314, filed 26 June 1998, hereafter Meyerzon), and further in view of Birrell et al. ("Distributed Garbage Collection for Network Objects," 15 December 1993, hereafter Birrell).

As per independent claim 1, Venners discloses a method for managing data referred to by referring data, comprising the steps of:

- Identifying one or more referring data portions, each of the one or more referring data portions having at least one link pointing to a target data stored in storage (pages 3-4)

- Determining when a link in one or more referring data portions ceases to exist (pages 3-4)

- Enabling removal of the target data from the storage when the one or more links pointing to the target data cease to exist (pages 3-4)

Venners fails to specifically disclose the data portion as being a document and the link as being a hypertext link. However, Meyerzon discloses documents and hyperlinks (column 2, lines 43-55).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Venners's method and Meyerzon's method, since it would have allowed a user to garbage-collect crawled documents (Venners: pages 3-4; Meyerzon: column 2, lines 19-42).

Venners further fails to specifically disclose garbage collection occurring over a network. However, Birrell discloses use of a garbage collector over a network allowing removal of documents when a referral to the document is removed (pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Birrell with Venners, since it would have allowed a user to remove garbage over a network (Birrell: pages 1-3).

As per dependent claim 2, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Meyerzon further discloses documents stored in different storage locations coupled over a network (column 1, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Venners and Meyerzon's method with Meyerzon's method, since it would have allowed a user to garbage-collect crawled documents (Venners: pages 3-4; Meyerzon: column 2, lines 19-42).

As per dependent claim 3, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Venners further discloses the method wherein the one or more referring data portions and the target data are in the same storage device (page 1: Here the same storage is the heap).

As per dependent claim 5, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Venners further discloses decrementing a counter when a link ceases to exist (pages 3-4).

As per dependent claim 6, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 5, and the same rejection is incorporated herein. Venners further discloses determining whether the count for the counter of the target data equals zero (pages 3-4).

As per independent claim 16, the applicant discloses the limitations similar to those in claim 1. Claim 16 is similarly rejected.

As per dependent claim 17, the applicant discloses the limitations similar to those in claim 2. Claim 17 is similarly rejected.

As per dependent claim 18, the applicant discloses the limitations similar to those in claim 3. Claim 18 is similarly rejected.

As per dependent claim 20, the applicant discloses the limitations similar to those in claim 5. Claim 20 is similarly rejected.

As per dependent claim 21, the applicant discloses the limitations similar to those in claim 6. Claim 21 is similarly rejected.

As per dependent claim 30, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Venners further discloses wherein a link pointing to target data ceases to exist when the link is deleted (pages 3-4).

As per dependent claim 31, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Venners further discloses wherein a link pointing to a target data ceases to exist when a referring portion of data having the link is deleted (pages 3-4).

Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venners, Meyerzon, and Birrell and further in view of Hug et al. (US 5806078, patented 8 September 1998, hereafter Hug).

As per dependent claim 7, Venners, Meyerzon, and Birrell disclose the limitations similar to those in claim 6, and the same rejection is incorporated herein. Venners and Meyerzon fail to specifically disclose wherein if the counter equals zero, further sending a message to an author of the target document asking whether the author wants to delete the target document from storage. However, Hug discloses sending a message

to an author of the target document asking whether the author wants to delete the target

document from storage (column 11, lines 15-20).

It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to have combined Venners, Meyerzon, and Birrell's method with

Hug's method, since it would have allowed a user to ensure that important data is not

deleted.

As per dependent claim 22, the applicant discloses the limitations similar to those

in claim 7. Claim 22 is similarly rejected.

(10) Response to Argument

The appellant's first argument is based upon the belief that there is no motivation or

suggestion to combine Venners, Meyerzon, and Birrell (page 5). However, the

examiner respectfully disagrees. As the examiner has previously stated, Venners

discloses determining when a link in one or more data portions ceases to exist (pages

3-4). Further, as the examiner acknowledges, Venners discloses neither the link being

a hypertext link nor the data portion being a document. However, Meyerzon teaches

wherein data is a document and a link is a hyperlink (column 2, lines 43-55). Therefore,

it would have been obvious to one of ordinary skill in the art at the time of the applicant's

invention to apply Venners's garbage collection algorithm that determines if a link

referencing data ceases to exist to hyperlinks referencing documents, since it would

have allowed a user to garbage collect documents having no hyperlink references.

Further, it would have allowed one of ordinary skill in the art at the time of the

applicant's invention to apply the garbage collection method of Venners to the web

crawler of Meyerzon in order to free memory for inaccessible data (web pages)

(Venners: pages 3-4; Meyerzon: column 2, lines 19-42).

Further, Venners fails to specifically disclose wherein the garbage collection

method occurs over a network. Although the combination of Venners and Meyerzon

appears to inherently teach garbage collection via the Internet (a network), the examiner

has added Birrell to teach garbage collection over a network allowing removal of

documents when a referral to the document is removed (pages 1-3). This combination

would have been obvious to one of ordinary skill in the art at the time of the applicant's

invention, since it would have allowed a user remove garbage (inaccessible data) over a

network (Birrell: pages 1-3).

Although the appellant argues that the examiner has relied upon "subjective

belief and unknown authority (page 6)," the examiner disagrees. The examiner has

provided motivations that rely upon the teachings of the references and suggestions

within the references to do so. Therefore, this argument is not persuasive.

The appellant's second argument is based upon the belief that there is no

reasonable expectation of success (page 7). The appellant argues that "Meyerzon

performs the deletion through web crawl counts without the need for the individual

reference counts of Venners (page 7)."

In response to applicant's argument, the test for obviousness is not whether the

features of a secondary reference may be bodily incorporated into the structure of the

primary reference; nor is it that the claimed invention must be expressly suggested in

any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Further, the examiner relies upon Venners for teaching a garbage collection algorithm for data removal (pages 3-4). Meyerzon is relied upon simply to teach hypertext links pointing to documents (column 2, lines 19-42). Combining Meyerzon with Venners would allow for determining when a hypertext link (link) in one or more referring documents (data portions) ceases to exist. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Meyerzon with Venners, since it would have allowed a user to garbage collect documents having no hyperlink references. Therefore, this argument is not persuasive.

The appellant's final argument with respect to group I is based upon the belief that the prior art of record fails to disclose all the claim limitations of claims 1 and 16 (pages 7-8). This argument is based upon the belief that the prior art of record fails to disclose document being associated with users on the network and fails to disclose determining when a user deletes one or more referring documents associated with that user (page 8). However, the examiner respectfully disagrees. Venners discloses a reference count to an object (page 3). This object has an associated reference count (page 3). When the object is initially created, the count is set to one, and each time a user (another object or root) references the object, the count is incremented (page 3). When the user is no longer referencing the object, the count is decremented (pages 3-4). Although Venners relates to object data as opposed to documents, Meyerzon has

been added to address the use of documents. Therefore, this argument is not persuasive.

With respect to group II, the appellant's arguments rely upon the arguments presented with respect to group I. This argument is not persuasive for the reasons presented above.
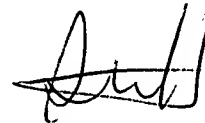
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.
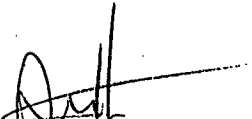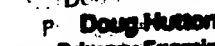
Respectfully submitted,

krs

STEPHEN HONG
SUPERVISORY PATENT EXAMINER

Conferees:

Stephen Hong, SPE 2178

Heather Herndon, SPE 2176

Doug Hutton
Primary Examiner
Technology Center 2100